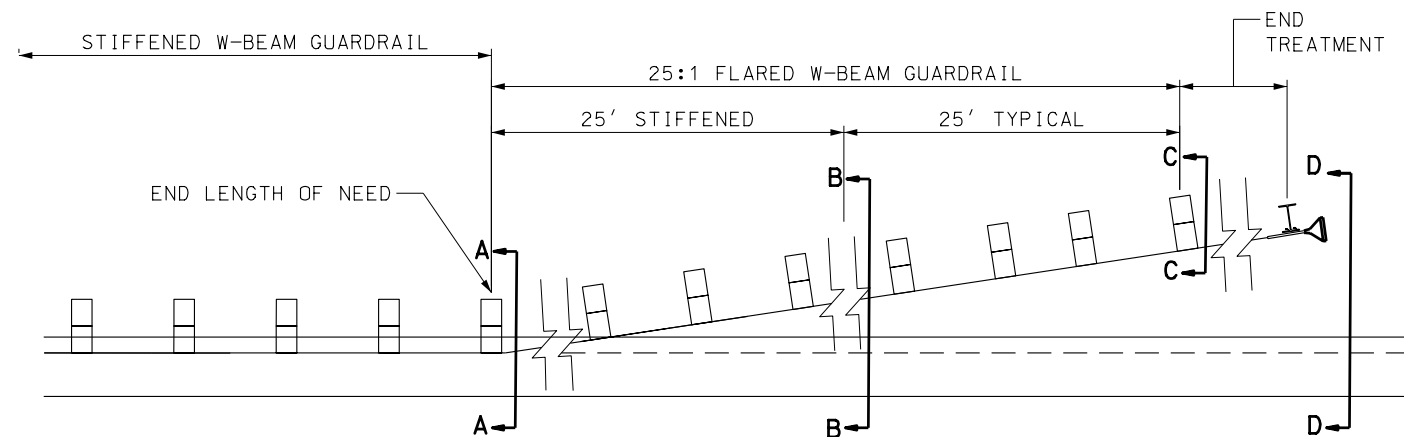
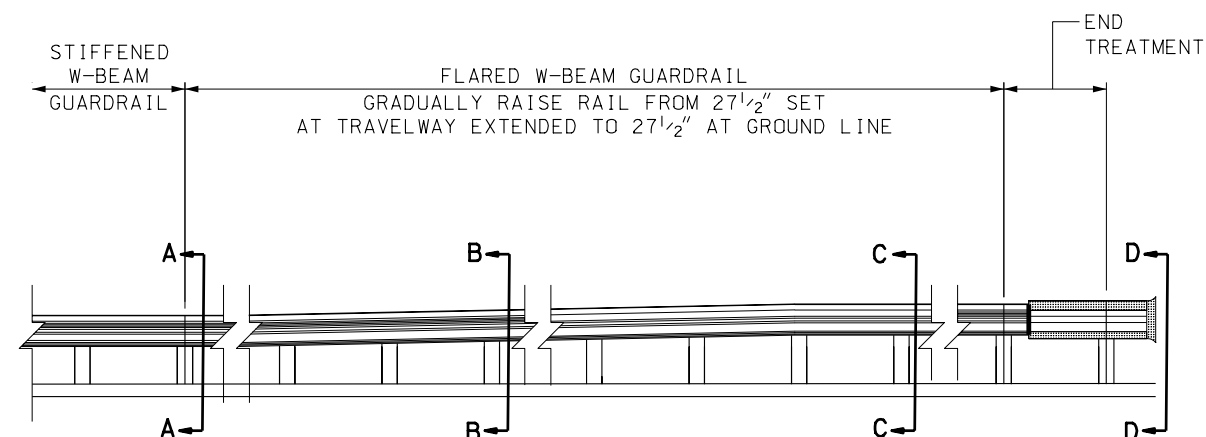


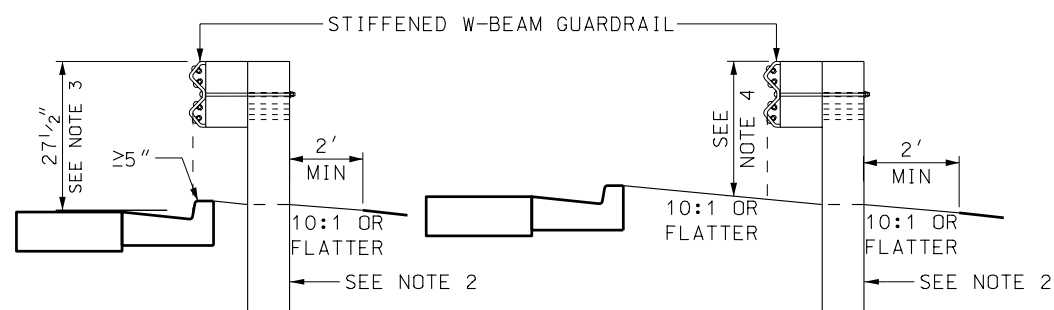
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PLAN  
SEE NOTE 1

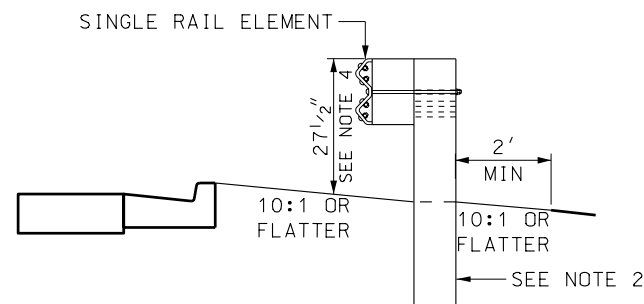


ELEVATION  
SEE NOTE 1

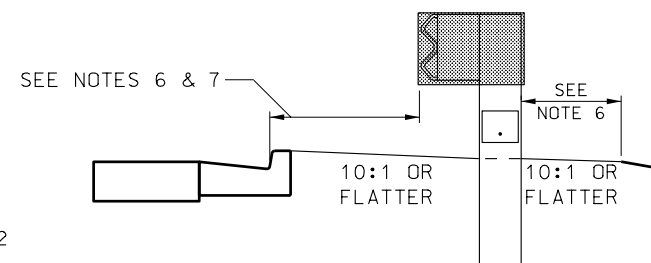


SECTION A-A

SECTION B-B



SECTION C-C

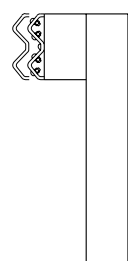


SECTION D-D

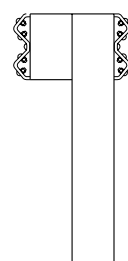
TYPE B1 CURB AND GUTTER SHOWN AS EXAMPLE  
APPLIES TO ALL CURBS AND/OR CURB AND GUTTER TYPES

SEE NOTE 1

#### STIFFENING METHODS



NESTED W-BEAM



BACK SIDE RAIL  
ATTACHMENT

#### NOTES:

1. USE STIFFENED W-BEAM GUARDRAIL WHEN DESIGN SPEED IS 50 MPH OR GREATER.
2. DRIVE GUARDRAIL POST TO THE DEPTH REQUIRED TO ATTACH BLOCK AND RAIL AT THE TOP HOLE OF THE POST FOR COMPLETE GUARDRAIL RUN.
3. SET RAIL HEIGHT AT FACE OF CURB FROM TRAVELWAY SURFACE EXTENDED, WHEN RAIL IS AT FACE OF CURB.
4. GRADUALLY RAISE RAIL ELEMENT OVER THE LENGTH OF FLARED BARRIER TO ATTACH END TREATMENT AT REQUIRED HEIGHT.
5. ADDITIONAL STIFFENING OF W-BEAM GUARDRAIL TRANSITION, BA 4B, NOT REQUIRED WHEN INSTALLED WITH CURB AND CURB AND GUTTER.
6. CONSTRUCT PAD AS PER APPLICABLE CC STD DWG.
7. OFFSET END TREATMENT AS PER APPLICABLE CC STD DWG.  
A. TYPE "G": PLACE ALONG 25:1 FLARE LINE.  
B. TYPE "H": PLACE WITH 4 FOOT OFFSET FROM 25:1 FLARE LINE.

W-BEAM GUARDRAIL & END TREATMENT INSTALLATION WITH CURB & GUTTER 5" OR GREATER

REVISIONS  
1 11/30/06 G.S. NEW DRAWING.

UTAH DEPARTMENT OF TRANSPORTATION  
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION  
RECOMMENDED FOR APPROVAL  
CHAIRMAN STANDARDS COMMITTEE  
APPROVED

NOV. 30, 2006  
DATE  
NOV. 30, 2006  
DATE  
DEPUTY DIRECTOR

W-BEAM GUARDRAIL  
WITH CURB  
AND GUTTER ≥5"

STANDARD DRAWING TITLE

STD DWG  
BA 452